

Home > Articles > Major Rebenchmarking of Labour Force Estimates

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Impacts of Labour Force rebenchmarking to preliminary rebased estimated resident population from July 2016 to October 2022.

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On this page

From benchmarks to estimates

National revisions to level estimates

Revisions to state and territory level estimates

Revisions to labour market regions

From benchmarks to estimates

"Benchmarks" refer to the population estimates that Labour Force Survey (LFS) data are aligned to, so that they accurately represent the Australian population. That is, how the monthly survey sample of around 50,000 people can effectively represent the 21 million usually resident civilian population aged 15 years and over.

To ensure that labour force statistics most effectively represent the labour market status of the population, data from the Labour Force Survey are 'weighted up' to the population benchmarks. Population benchmarks are based on Australia's official population statistics – the Estimated Resident Population (ERP).

Every five years, the ABS 'rebases' Australia's official population estimates to a new Census. In June 2022, the ERP for Australia and the states and territories were rebased to the 2021 Census, with population estimates revised back to the previous Census base of the June quarter 2016. In the subsequent months, regional population estimates were also rebased

and revised. Further information on this can be found in <u>Methodology used in rebased</u> population estimates, <u>June 2021 (/statistics/detailed-methodology-information-papers/methodology-used-rebased-population-estimates-june-2021)</u>.

Following this, the Labour Force population benchmarks are also updated to reflect the rebased ERP. Rebenchmarking does not involve any change to the underlying data collected in the Labour Force Survey, just the population benchmarks that survey data is weighted to.

This five-yearly process is referred to as "major rebenchmarking", to differentiate it from the regular and ongoing "quarterly rebenchmarking" undertaken in the February, May, August, and November reference months. See <u>Labour Force</u>, <u>Australia methodology (/ methodologies/labour-force-australia-methodology/nov-2022#weighting-and-estimation)</u> for more information.

Major rebenchmarking has resulted in revisions to Labour Force estimates going back to July 2016. From July 2021, this rebenchmarking also includes revisions to population component data for natural increase, overseas migration, and interstate migration (that is, the regular quarterly rebenchmarking revisions after the most recent Census base).

To help understand these two overlapping rebenchmarking processes, this article presents information on revisions at June 2021 (at the end of the 'major rebenchmarking revision period) and October 2022 (at the end of the current 'quarterly revision period').

Similar to the last five-yearly cycle, Labour Force estimates will undergo a second major rebenchmarking to the final rebased ERP in the November 2023 issue, in December 2023.

National revisions to level estimates

Major rebenchmarking to preliminary rebased ERP had a negligible impact on headline indicators from July 2016 to June 2021, with revisions of less than 0.1 pts at the Australia level for the seasonally adjusted and trend unemployment rate, participation rate and employment to population ratio. Seasonally adjusted employment at June 2021 was revised down by 21,200 people (0.2 per cent), and in line with this, hours worked was revised down by 0.4 million hours (0.0 per cent).

Rebenchmarking from July 2021 onwards also includes quarterly revisions to population component data which is particularly impacted by revisions to the net overseas migration (NOM) component, as international travel has resumed. Given the extent of disruption in overseas migration patterns during the COVID-19 pandemic, there have been larger than usual revisions to NOM during 2022, underpinning an upward revision to seasonally adjusted employment of 87,500 people (0.6 per cent) for October 2022, and a similar (0.6

per cent) upward revision to seasonally adjusted hours worked.

National revisions - Trend

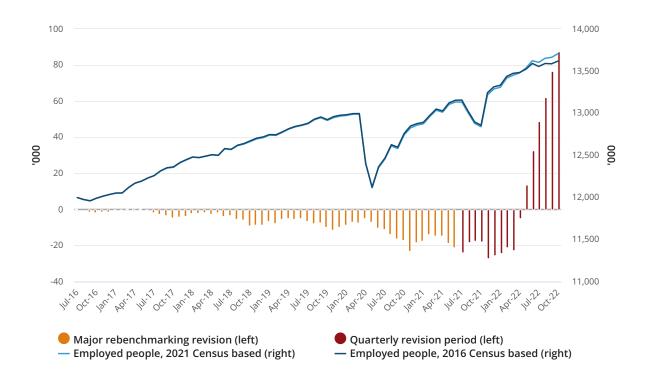
	Revision Jun-21	Revision (%) Jun-21	Revision Oct-22	Revision (%) Oct-22	
Trend					
Employed people	-19,500	-0.1%	96,500	0.7%	
Unemployed people	-1,000	-0.1%	8,800	1.8%	
Unemployment rate	0.0 pts	na	0.0 pts	na	
Employment to population ratio	0.0 pts	na	0.0 pts	na	
Participation rate	0.0 pts	na	0.1 pts	na	
Monthly hours worked in all jobs	-0.3 million	0.0%	18.2 million	1.0%	

National revisions - Seasonally adjusted

	Revision Jun-21	Revision (%) Jun-21	Revision Oct-22	Revision (%) Oct-22	
Seasonally adjusted					
Employed people	-21,200	-0.2%	87,500	0.6%	
Unemployed people	-1,200	-0.2%	6,800	1.4%	
Unemployment rate	0.0 pts	na	0.0 pts	na	
Employment to population ratio	0.0 pts	na	0.0 pts	na	
Participation rate	0.0 pts	na	0.1 pts	na	
Monthly hours worked in all jobs	-0.4 million	0.0%	12.3 million	0.6%	

The difference in revisions for the major rebenchmarking revision period and the quarterly rebenchmarking revision period can be seen in the following graph for employed people, with the larger revisions coinciding with quarterly revisions to benchmarks associated with increasing cross-border migration through 2022.

Employed people, Seasonally adjusted

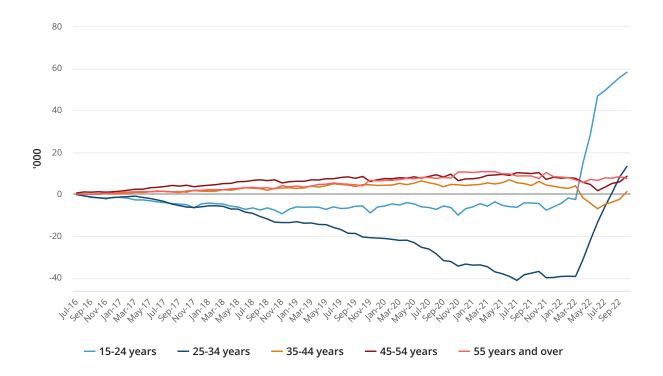


Quarterly revision period is from July 2021 to October 2022 and includes major rebenchmarking revisions and regular quarterly rebenchmarking revisions to component data.

The age groups with the largest revisions across the rebenchmarking period were those aged 15 to 34 years. From July 2016 to March 2022, revisions to seasonally adjusted employment for these ages followed a downward pattern which was driven by the rebenchmarking to preliminary rebased ERP.

Since the reopening of international borders from March 2022, there has been a consistently higher NOM component in Labour Force benchmarks, reflecting increases in temporary student visa arrivals and low levels of departures. This has resulted in upward revisions to seasonally adjusted employment for the 15 to 34 age group. From April 2022 onwards, revisions to the 15 to 34 age group followed an upward pattern, with the largest revision of 58,200 people (2.8 per cent) for the 15 to 24 age group in October 2022.

Revision to employed people by age, Seasonally adjusted

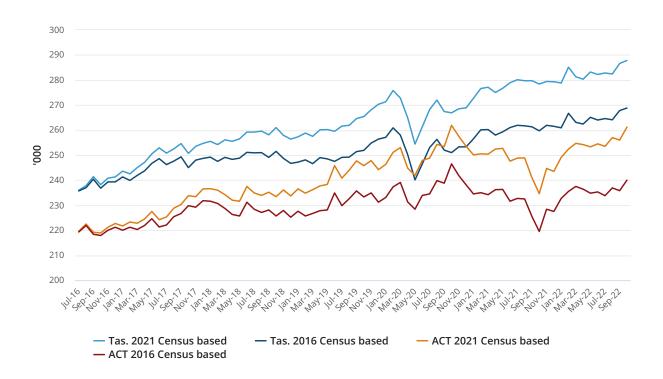


Revisions from July 2021 to October 2022 include major rebenchmarking revisions and regular quarterly rebenchmarking revisions to component data.

Revisions to state and territory level estimates

In line with the revisions to ERP, the largest relative revisions to seasonally adjusted employment at the state and territory level were for Tasmania and the Australian Capital Territory, both of which were revised upwards.

Employed people, Tasmania and Australian Capital Territory, Seasonally adjusted



Revisions from July 2021 to October 2022 include major rebenchmarking revisions and regular quarterly rebenchmarking revisions to component data.

State and Territory revisions, June 2021 - Seasonally adjusted

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	North Territo
Employed people	4,108,500	3,371,500	2,656,300	884,700	1,447,500	278,900	129,300
Revision	-1.3%	-1.9%	0.2%	2.1%	2.9%	6.9%	1.7%
Employment to population ratio	62.4%	63.0%	63.1%	59.5%	65.3%	59.1%	67.3%
Revision	-0.1 pts	-0.1 pts	0.0 pts	0.1 pts	0.1 pts	0.8 pts	0.2 pts
Unemployment rate	5.1%	4.6%	5.2%	5.3%	5.0%	4.7%	4.8%
Revision	0.0 pts	0.0 pts	0.0 pts	0.0 pts	0.0 pts	0.0 pts	0.0 pts
Participation rate	65.7%	66.0%	66.5%	62.8%	68.8%	62.0%	70.7%
Revision	-0.1 pts	-0.1 pts	0.0 pts	0.1 pts	0.1 pts	0.9 pts	0.2 pts
Monthly hours worked in all jobs	571 million	431 million	374 million	119 million	203 million	37 million	19 million
Revision	-1.2%	-2.0%	0.4%	2.3%	3.1%	7.3%	1.6%

From July 2021 onwards, upward revisions to NOM had the greatest relative impact on estimates for the Australian Capital Territory (with the number of employed people revised up by 5.5%) and Victoria (up by 3.9%).

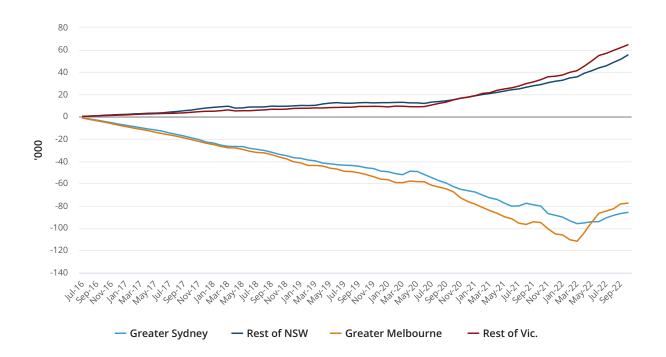
State and Territory revisions, October 2022 - Seasonally adjusted

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	North Territo
Employed people	4,293,100	3,501,700	2,786,700	921,600	1,504,100	287,800	140,600
Revision	-0.7%	-0.5%	0.6%	2.7%	3.3%	7.1%	2.4%
Employment to population ratio	64.2%	64.2%	64.1%	61.0%	66.3%	60.0%	71.0%
Revision	0.0 pts	-0.1 pts	0.0 pts	0.2 pts	0.1 pts	0.9 pts	0.2 pts
Unemployment rate	3.0%	3.7%	3.3%	4.1%	3.6%	3.9%	3.7%
Revision	0.0 pts	0.0 pts	0.0 pts	0.0 pts	0.0 pts	-0.1 pts	0.0 pts
Participation rate	66.3%	66.7%	66.2%	63.6%	68.8%	62.5%	73.8%
Revision	0.0 pts	-0.1 pts	0.0 pts	0.2 pts	0.1 pts	0.9 pts	0.2 pts
Monthly hours worked in all jobs	605 million	481 million	392 million	126 million	213 million	38 million	20 million
Revision	-0.8%	-0.6%	0.9%	2.7%	3.5%	7.5%	2.6%

Revisions to labour market regions

Major rebenchmarking resulted in revisions to regional Labour Force statistics. For the two largest states, these reflected a downward revisions pattern for employed people in Greater Sydney and Greater Melbourne, and upward pattern for those people living outside of the capital cities.

Revision to employed people by labour market region, New South Wales and Victoria, Original



Revisions from July 2021 to October 2022 contain major rebenchmarking revisions and regular quarterly rebenchmarking revisions to component data.